

AMENDMENTS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Previously presented) A compound that specifically inhibits the formation of the human C5b-9 complex selected from the group consisting of a peptidomimetic having the structure and function of human CD59 amino acid residues 42-58 of SEQ ID NO:3 selected from the group consisting of a peptide, a nucleic acid, a small molecule and an anti-ID anti-CD59 amino acid residues 42-58 antibody, the peptidomimetic and an anti-CD59 antibody binding specifically to human C9 at amino acid residues 26-51 of SEQ ID NO:14.
2. (Previously presented) The compound of claim 1, selected from the group consisting of peptides, nucleic acids, and small molecules which bind specifically to amino acids 25-51 of human C9 in SEQ ID NO:14.
3. (Previously presented) The compound of claim 2, wherein the compound is an antibody.
4. (Previously presented) The compound of claim 2, wherein the compound is a chimeric peptide which includes the amino acids 42 to 58 of the human sequence CD59 in SEQ ID NO:3.
5. (Previously presented) The compound of claim 2, wherein the compound is a covalently cyclized peptide comprising human CD59 amino acid residues 42 to 58 in SEQ ID NO:3.
6. (Currently amended) The compound of claim 2, wherein the compound is a peptide of less than forty amino acids residues including amino acid residues 42 to 58 of human CD59 in SEQ ID NO:3.

7. (Previously presented) A composition comprising a compound that specifically inhibits the formation of the human C5b-9 complex selected from the group consisting of a peptidomimetic having the structure and function of human CD59 amino acid residues 42-58 of SEQ ID NO:3 selected from the group consisting of a peptide, a nucleic acid, and a small molecule and an anti-ID anti-CD59 amino acid residues 42-58 antibody, the peptidomimetic and an anti-CD59 antibody binding specifically to amino acid residues 26 to 51 of human C9 in SEQ ID NO:14, and a pharmaceutically acceptable carrier for administration to patients in need thereof.
8. (Previously presented) The compound of claim 1 wherein the compound is a peptidomimetic compound comprising the side chains of human CD59 amino acid residues His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in an equivalent spatial orientation and alignment to that presented on the surface of human CD59.
9. (Previously presented) The compound of claim 8 wherein the spatial orientation and alignment of the side chains of His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in the compound are equivalent to the spatial orientation and alignment deduced by NMR structure determination.
10. (Currently amended) A method for inhibiting human C5b-9 complex assembly comprising administering an effective amount of a composition comprising a compound binding specifically to amino acid residues 26 to 51 of human C9 in SEQ ID NO:14 selected from the group consisting of a peptidomimetic having the structure and function of human CD59 amino acid residues 42-58 in SEQ ID NO:3 selected from the group consisting of a peptide, a nucleic acid, and a small molecule, and an anti-ID anti-CD59 amino acid residues 42-58 antibody, the peptidomimetic and anti-CD59 antibody binding specifically to human C9 at amino acid residues 26-51 of SEQ ID NO:14.
11. (Currently amended) The method of claim 10, wherein the compound is a peptidomimetic that is a small molecule which binds specifically to amino acids 26 to 51 of human C9 of SEQ ID NO:14.

12. (Previously presented) The method of claim 10, wherein the compound is an antibody.
13. (Previously presented) The method of claim 10, wherein the compound is a chimeric peptide which includes the amino acids 42 to 58 of the human sequence of CD59 in SEQ ID NO:3.
14. (Previously presented) The method of claim 10, wherein the compound is a covalently cyclized peptide comprising human CD59 amino acid residues 42 to 58 in SEQ ID NO:3.
15. (Previously presented) The method of claim 10, wherein the compound is a peptide of less than forty amino acids including amino acid residues 42 to 58 of human CD59 in SEQ ID NO:3.
16. (Original) The method of claim 19, wherein the composition further comprises a pharmaceutically acceptable carrier for administration to patients in need thereof.
17. (Previously presented) The method of claim 10, wherein the composition is administered to a patient in need of suppression of complement-mediated inflammation.
18. (Previously presented) The method of claim 10 wherein the compound is a peptidomimetic comprising the side chains of human CD59 amino acid residues His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in the spatial orientation and alignment of human CD59.
19. (Previously presented) The method of claim 18 wherein the spatial orientation and alignment of the side chains of His⁴⁴, Asn⁴⁸, Asp⁴⁹, Thr⁵¹, Thr⁵², Arg⁵⁵, and Glu⁵⁸ of SEQ ID NO:3 in the compound are deduced by NMR structure determination.

20-35. (Canceled)